

VIRGINIA DEPARTMENT OF TRANSPORTATION

MOBILITY MANAGEMENT DIVISION

MEMORANDUM

GENERAL SUBJECT: Traffic Signs		NUMBER: TE-311
SPECIFIC SUBJECT: Overhead and Advance Ground Mounted Street Name Signs at Signalized Intersections		DATE: May 21, 2003
		SUPERSEDES:
DIRECTED TO: District Administrators	SIGNATURE: <i>Raymond J. Khoury, P.E.</i>	

The Department has identified that to install overhead and advance ground mounted street name signs will provide benefits for the motoring public and to that end has developed the following directive. Overhead and/or advance ground mounted street name signs shall be erected at all proposed and reconstructed Department maintained signalized intersections in accordance with this directive. Design details for these signs are attached. The display of block numbering on street name signs is at the discretion of the District Traffic Engineer; however, it is recommended that they be considered for highly urbanized locations. Color of the street name signs shall be a white message on a green background except where other colors are already established and displayed for a specific section of counties/towns. In those locations, the established color may be used.

All proposed traffic signal structures shall be designed to accommodate the installation of the overhead street name signs with the following exceptions where the District Traffic Engineer has the option of only installing advance ground mounted street name signs:

- Mast arm pole installations where the sign due to its horizontal dimension cannot be placed on the mast arm. This option is only allowed when the use of smaller letters as indicated on the attached sign designs does not allow for the installation of the signs on the mast arms.
- Mast arm pole installations where the angle of the mast arm to the roadway is not applicable to such installation
- Strain pole installations

Mast arm poles that are generic in nature and designed for non-specific locations, such as those for regional signal projects, shall be designed using street name signs having dimensions of twelve (12) feet in length and two and one-half (2½) feet in height (30 square feet).

Street name signs should be installed on the mast arm between the mast arm pole and the first traffic signal head. Signs shall be located within that distance to provide optimum viewing for the motorist but shall be no closer than two (2) feet to the housing of the traffic signal head. Sign placement on arms for mast arm poles that are generic in nature will depend upon the design parameters set for those poles under that specific contract and shall be verified prior to installation. If the District Traffic Engineer decides to install street name signs on those structures listed in the exceptions above, the street name signs shall be installed on the traffic signal pole. The sign displaying the next block number for through motorists is intended to be installed on the traffic signal pole. Signs mounted on the traffic signal pole shall be installed centered on the pole unless the structure was designed to accommodate the loadings of an offset sign installation. It is the intent that all overhead signing be installed on the traffic signal pole or mast arm on the far right side of the intersection for the through traffic unless such does not exist such as tee intersections for the trunk street, median installed traffic signal poles, etc. In those situations, the signs shall be installed on the applicable pole/arm for the approach.

If the crossing street is an entrance to a shopping center that has no official street name, the name of the shopping center shall not be used on the sign; the generic message "Shopping Center Ent" should be displayed. If the crossing street is an entrance to a commercial development other than a shopping center, the generic message "Commercial Ent" should be displayed. If the crossing street is an entrance to a small business, such as a fast food business, a hardware store, etc., reference to the entrance shall be displayed on the sign only if an official street name has been assigned to the entrance by the local jurisdiction. Engineering judgment shall be used in determining whether an entrance should be signed.

Advance ground mounted street name signs should also be installed on an approach at signalized intersections in accordance with the following:

- Where there are three (3) or more through lanes and the posted speed limit is 45 mph or greater
- On approaches where overhead street name signs are not installed

Advance ground mounted street name signs may also be installed on an approach where the posted speed limit is less than 45 mph and/or there is less than three (3) through lanes; however, this should be limited to locations where there is a high demand for traffic to turn onto the intersecting street. Dual indication of the advance ground mounted street name signs should be accomplished when determined necessary by the District Traffic Engineer.

These requirements are effective immediately for those projects that have not been turned in for advertisement. For those existing intersections that currently have street name signs installed on traffic signal structures that do not conform to these requirements, those signs may remain in place until maintenance replacement time. While it is not mandated, it is recommended that all street name signs on an approach at an intersection be converted to the designs outlined herein at the time of maintenance

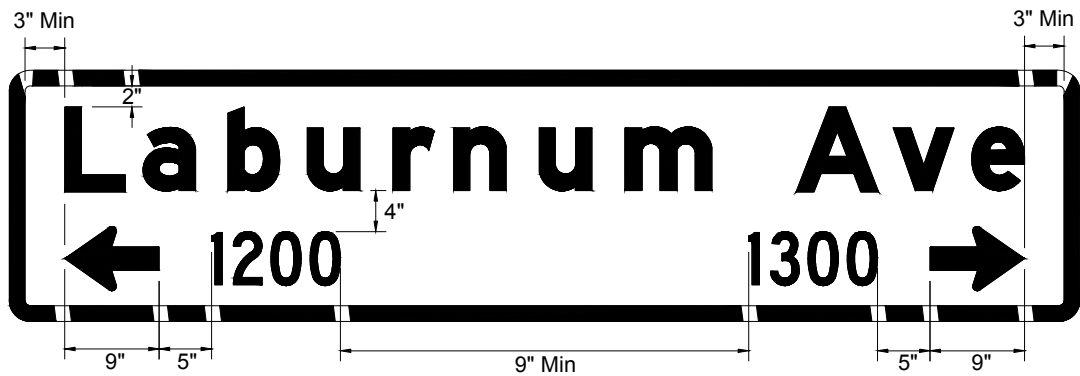
replacement even if only one sign needs maintenance replacement. If the designs outlined herein cannot be installed due to overloading of the structure at maintenance replacement time, the existing design may continue to be used.

Installation of these signs at existing signalized intersections not having overhead and advance street name signs is at the decision of the district with no final installation date being required.

The design of existing structures may need to be reviewed by the District Structure and Bridge Engineer to determine whether the structure can handle the additional loading prior to sign installation. Traffic Engineering Memorandum No. TE-310 shall be used to determine whether the structure design needs to be reviewed.

While this memorandum has tried to address the major issues related to the design and installation of overhead and ground mounted advance street name signs, it is recognized that variances from this memorandum may be needed to conform to unique situations. Therefore, when variances are needed, a request with sufficient background information shall be submitted to the State Mobility Management Engineer for approval.

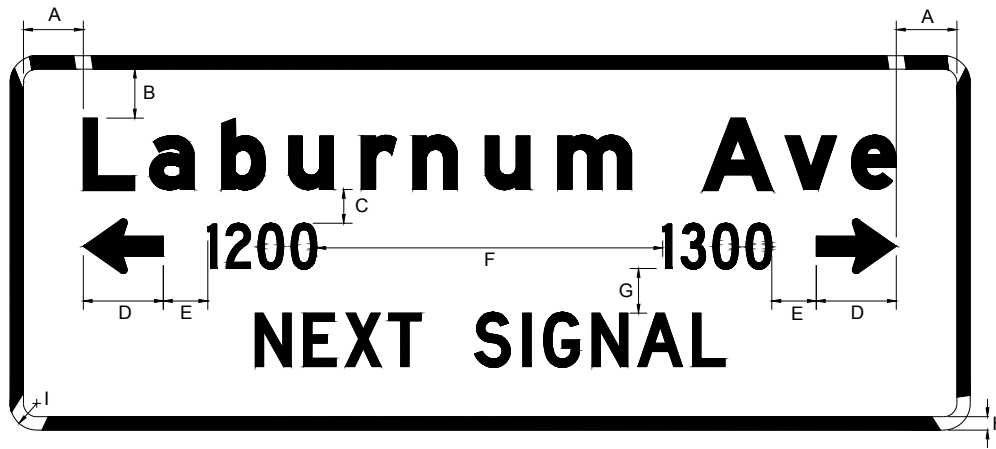
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Mr. Dan Dennis



This sign is intended to be used on traffic signal structures to display the street name and block numbers.

SHAPE	Horizontal Rectangle		
COLOR	Message and Border:	White (Reflectorized)	
	Field:	Green (Reflectorized)	
SIZE	Horizontal:	Variable	
	Vertical:	24"	
MESSAGE	Line 1	Upper/Lower Case:	8"/6" E(M)
	Line 2	Numerals:	5" C
BORDER WIDTH	1½"		
CORNER RADIUS	2"		

Notes: Line 1 shall be centered horizontally on the sign. Arrow tips shall be aligned with the left and right edges of the text except when text length is insufficient. Series B series numerals may be used on Line 2 when text length is insufficient provided such use allows for a better design. Arrows shall be the same as shown on Page 3-38 of the Standard Highway Signs book. 6"/4½" E(M) characters may be used for Line 1 and 4" C for Line 2 on new structures if sufficient space will not exist for the larger sign installation, and on existing structures if the same is true or if the structure cannot support the additional loading of the larger sign but can support the reduced sign size loading. Sign colors other than white on green may be used if those colors are already established and displayed for a specific section of counties/towns.



This sign is intended to be ground mounted in advance of a traffic signalized intersection to display the street name and block numbers. Sign size B shall only be used where right-of-way or geometrics do not allow the installation of the larger sign.

SHAPE	Horizontal Rectangle		
COLOR	Message and Border:	White (Reflectorized)	
	Field:	Green (Reflectorized)	
SIZE	Horizontal:	A Variable	B Variable
	Vertical:	42"	36"
MESSAGE	Line 1	Upper/Lower Case:	8"/6" E(M)
	Line 2	Numerals:	5" C
	Line 3	Capitals:	6" D
			6"/4½" E(M)
			4" C
			4" D

SIGN	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H	I
A	6 (Min)	5	4	9	5	9 (Min)	5	1½	3
B	4 (Min)	6	4	9	4	9 (Min)	4	1¼	2

Notes: Lines 1 and 3 shall be centered horizontally on the sign. Arrow tips shall be aligned with the left and right edges of the text except when text length is insufficient. Series B numerals may be used on Line 2 when the text length is insufficient provided such use allows for a better design. Arrows shall be the same as shown on Page 3-38 of the Standard Highway Signs book. Sign colors other than white on green may be used if those colors are already established and displayed for a specific section of counties/towns.



This sign is intended to be used on traffic signal structures to display the street name.

SHAPE	Horizontal Rectangle	
COLOR	Message and Border: Field:	White (Reflectorized) Green (Reflectorized)
SIZE	Horizontal: Vertical:	Variable 18"
MESSAGE	Line 1 Upper/Lower Case:	8"/6" E(M)
BORDER WIDTH	1½"	
CORNER RADIUS	2"	

Notes: Line 1 shall be centered horizontally on the sign. 6"/4½" E(M) characters may be used on new structures if sufficient space will not exist for the larger sign installation, and on existing structures if the same is true or if the structure cannot support the additional loading of the larger sign but can support the reduced sign size loading. Sign colors other than white on green may be used if those colors are already established and displayed for a specific section of counties/towns.

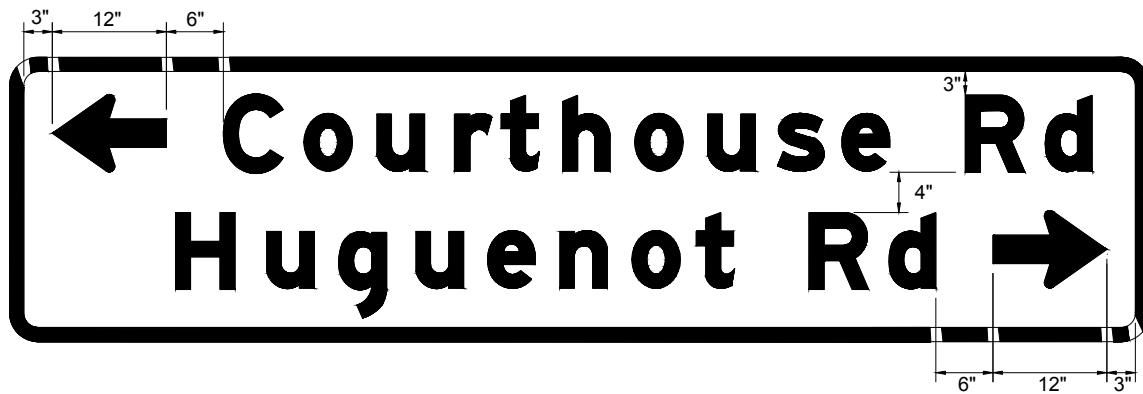


This sign is intended to be ground mounted in advance of a traffic signalized intersection to display the street name. Sign size B shall only be used where right-of-way or geometrics do not allow the installation of the larger sign.

SHAPE	Horizontal Rectangle			
COLOR	Message and Border:		White (Reflectorized)	
	Field:		Green (Reflectorized)	
SIZE	Horizontal:	A Variable	B Variable	
	Vertical:	30"	24"	
MESSAGE	Line 1	Upper/Lower Case:	8"/6" E(M)	6"/4½" E(M)
	Line 2	Capitals:	6" D	4" D

SIGN	DIMENSIONS (INCHES)				
	A	B	C	D	E
A	6 (Min)	4	6	1½	3
B	4 (Min)	4	4	1¼	2

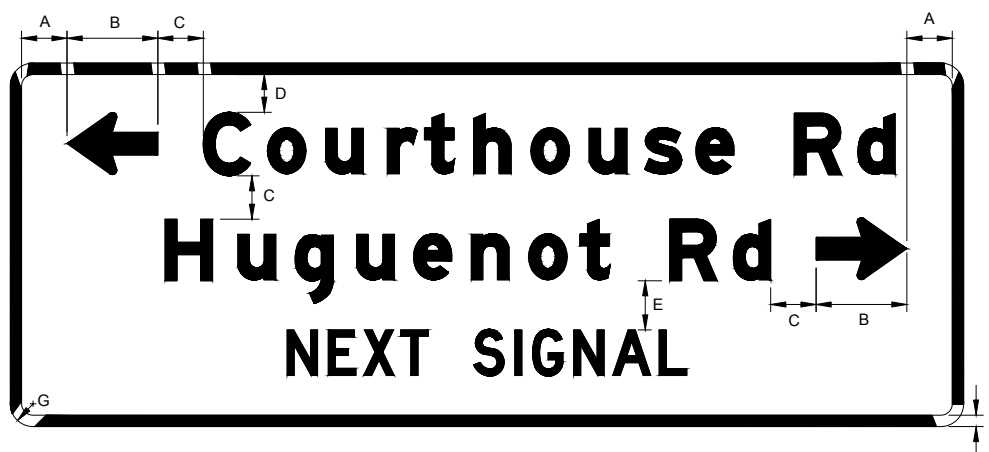
Notes: Lines 1 and 2 shall be centered horizontally on the sign. Sign colors other than white on green may be used if those colors are already established and displayed for a specific section of counties/towns.



This sign is intended to be used on traffic signal structures to display two street names for an intersecting street.

SHAPE	Horizontal Rectangle		
COLOR	Message and Border:	White (Reflectorized)	
	Field:	Green (Reflectorized)	
SIZE	Horizontal:	Variable	
	Vertical:	30"	
MESSAGE	Line 1	Upper/Lower Case:	8"/6" E(M)
	Line 2	Upper/Lower Case:	8"/6" E(M)
BORDER WIDTH	1½"		
CORNER RADIUS	3"		

Notes: The name of the street to the left shall be displayed at the top with the name of the street to the right displayed on the bottom. Arrows shall be the same as shown on Page 3-38 of the Standard Highway Signs book except scaled to have a length of twelve (12) inches. 6"/4½" E(M) characters may be used on new structures if sufficient space will not exist for the larger sign installation, and on existing structures if the same is true or if the structure cannot support the additional loading of the larger sign but can support the reduced sign size loading. Sign colors other than white on green may be used if those colors are already established and displayed for a specific section of counties/towns.

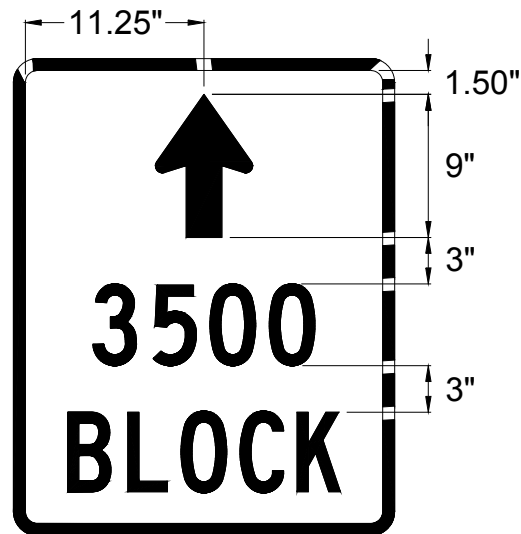


This sign is intended to be ground mounted in advance of a traffic signalized intersection where there are two names for the intersecting street. Sign size B shall only be used where right-of-way or geometrics do not allow the installation of the larger sign.

SHAPE	Horizontal Rectangle		
COLOR	Message and Border:	White (Reflectorized)	
	Field:	Green (Reflectorized)	
SIZE	Horizontal:	A Variable	B Variable
	Vertical:	48"	36"
MESSAGE	Line 1	Upper/Lower Case:	8"/6" E(M)
	Line 2	Upper/Lower Case:	8"/6" E(M)
	Line 3	Capitals:	6" D

SIGN	DIMENSIONS (INCHES)						
	A	B	C	D	E	F	G
A	6	12	6	5	7	1½	3
B	4	9	4	4¼	5	1¼	3

Notes: Line 3 shall be centered horizontally on the sign. Arrows shall be the same as shown on Page 3-38 of the Standard Highway Signs book except those on Sign A shall be scaled to have a length of twelve (12) inches. Sign colors other than white on green may be used if those colors are already established and displayed for a specific section of counties/towns.



This sign is intended to be used on traffic signal structures to display the block number following the signalized intersection.

SHAPE	Vertical Rectangle		
COLOR	Message and Border:	Field:	White (Reflectorized) Green (Reflectorized)
SIZE	Horizontal:	Vertical:	24" 30"
MESSAGE	Line 1	Arrow:	9"
	Line 2	Numerals:	5" C
	Line 3	Capitals:	5" C
BORDER WIDTH	$\frac{3}{4}$ "		
CORNER RADIUS	1½"		

Notes: Lines 1, 2 & 3 shall be centered horizontally on the sign. Arrow shall be the same as shown on Page 3-38 of the Standard Highway Signs book. Sign colors other than white on green may be used if those colors are already established and displayed for a specific section of counties/towns.